



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,920	04/15/2004	Dale M. Pitt	BOI-0035US	8932

60483 7590 02/12/2007
LEE & HAYES, PLLC
421 W. RIVERSIDE AVE.
SUITE 500
SPOKANE, WA 99201

EXAMINER

COLLINS, TIMOTHY D

ART UNIT PAPER NUMBER

3643

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/825,920

Applicant(s)

PITT, DALE M.

Examiner

Timothy D. Collins

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 4, 14-25, 29 and 39-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13, 26-28, 30-38 and 51-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION***Requirement for information***

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application. Because the applicant in this application is a contributor to the reference "An Advanced Buffet Load Alleviation System" AIAA-2001-1666 which is also done by The Boeing Company. The applicant is required to submit to the examiner any information regarding the testing of the device as seen in the AIAA reference. The device appears to be solving the same problem and appears to be the applicant's invention. The applicant must therefore also describe the interaction of the two actuators of the reference device and how they are mounted, and how this differs from applicant's present claims. A reply to this action that does not include detailed answers to the above questions will be treated as non-responsive and may lead to abandonment.

Election/Restrictions

Claims 4, 14-25, 29, and 39-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/3/06.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,6,7,8,9,11, and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 4751821 to Birchard (hereinafter called 821).

a. Re claim 1, 821 discloses a first actuator 2-1, and second actuator 2-2.

Also 821 discloses a linkage between them (see figure 11). NOTE that the “component” of the claim is not positively claimed. The claim states “a hybrid actuator FOR actuating a component”, which does not actually require that a component be present. The claim merely requires that a component be capable of being actuated. In the case of 821 the component which the actuators are capable of actuating is the arm or mechanical elements as seen in lines 13-15 of column 1.

b. Re claim 2, 821 discloses that the actuator is hydraulic, see column 9 at top.

c. Re claim 6, 821 discloses a pushrod as seen in figure 11. Figure 11 shows a connection in the middle that has a few parts, one of which at least (the one side on the left or the right) is considered to be a “push rod” because it can

impart a pushing motion and transmit force across the connection to the other actuator. Therefore a push rod is seen in figure 11.

d. Re claim 7, 821 discloses a mount as seen in figure 11. Figure 11 shows a connection in the middle that has a few parts, one of which at least (the one side on the left or the right) is considered to be a "mount" because it can transmit force across the connection to the other actuator and hold one actuator with respect to the other. Therefore a mount is seen in figure 11.

e. Re claim 8, 821 discloses that adding a first and second distance equals the third as seen in the figure 2. The first and second distances add together to give a third distance, also for example if the second distance is 0, then the first and third distances are equal.

f. Re claim 9, 821 discloses that the first and second actuators are capable of moving in first and second frequencies because they can physically be set to move or caused to move at different rates. The disclosure of the word "frequency" is not needed in the reference as a frequency is a measure of rate and moving objects inherently move at some "rate" and therefore the actuators are capable of moving at first and second rates because they are independently controllable and therefore they are "adapted" to move in first and second frequency ranges.

g. Re claim 11, 821 discloses a clevis as seen in figure 11. Also note that the clevis of figure 11 is either one of the left or right side connectors which has a pin through the center connection. In this example of figure 11, 2 clevi can be

seen in that there is one that is composed of the connection which is directly connected to the body on the left and one that is directly connected to the body on the right, and in combination with either of these two components the center pin makes either of those other connectors a clevis. A clevis as defined by www.Answers.com/topic/clevis is "a U-shaped metal piece with holes in each end through which a pin or bolt is run, used as a fastening device". This definition is used as proof that the examiner's interpretation of a clevis is a standard one.

h. Re claim 12, 821 discloses that the device may operate at 0 frequency. The examiner maintains that the device of 821 may be stationary or "operating" at a frequency of 0, which is not moving with respect to time. Also note that the claim states that the device is "adapted" to move in this way which means "capable" of moving in this way and it is clear that the object may not move at all, as it may be stationary.

3. Claims 1-3,5-9,11-13,26-28,30-38, and 51-60 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by "An Advanced Buffet Load Alleviation System" AIAA-2001-1666 (called buffet).

i. See page 3, actuators are hydraulic (inherently in the F-18), and Piezo as seen in the reference as well as a pushrod (the end of the hydraulic cylinder). The examiner maintains that the reference discloses a first actuator (a piezo actuator) and a second actuator (a hydraulic actuator inherently in the F/A 18)

and a motion sensor "measured motion at the tip of the tail" as seen in page 2 in the second column near the top. Also buffet discloses a processor linked to the motion sensor and controlling the actuators at least in figure 2 where the controllers are seen. Note also that on page 3 in the paragraph above the figure 2 and in the paragraph that bridges the first and second columns are the important parts of the description of the reference. Also see that an accelerometer is seen in the top line of the column 2 in page 3. All of the details of the claims are seen in the reference (which it is noted is written by the applicant). Also note that a fuselage with an appendage (tail section) is seen inherently in the reference.

Response to Arguments

Applicant's arguments filed 11/14/06 have been fully considered but they are not persuasive. For details of responses to the arguments see the above explanations in the rejections.

Re applicant's argument that the linkage combines distances, the examiner maintains that the reference shows inherently that there is some piece that the actuator is attached to and therefore there is a linkage and when the linkage moves in response to movement of the other actuator the movements are combined. The movement of one of the actuators may also be at a rate of 0 (which is claimed) and which means that the third distance is the same as the non-zero distance.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The definition of Clevis: <http://www.answers.com/topic/clevis>

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy D. Collins whose telephone number is 571-272-6886. The examiner can normally be reached on M-F, 7:00-3:00, with every other Fri. off.

Art Unit: 3643

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 571-272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 1/30/07
Timothy D. Collins
Primary Examiner
Art Unit 3643



PETER M. POON
SUPERVISORY PATENT EXAMINER